ISRCS 2013
Control Systems

Hosted in San Francisco, California • August 13-15, 2013

6th International Symposium on Resilient Control Systems

The major purpose of this symposium is to extend and endorse particular concepts that will generate novel research and codify resilience in next generation control system designs.

There will be four tracks for this year's symposium:
- Complex Networked Control Systems
- Data Fusion
- Sensor Design/Networks
- Mixed Initiative Response

Statement of Themes: Energy security and sustainability are important concerns to individuals and industry alike, but even with the promise of a smart grid, increasing research will be necessary to ensure that what is achieved is more resilient in nature. As mobile and industrial robotics form an ever increasing role in both national defense and plant automation, the dependence on these systems elevates a need to ensure continued operability in spite of hazardous environments. Through appropriate sessions and presentations, the symposium will highlight resilience in light of the power system and robotics, bringing to light resilience perspectives important to these applications.

Submission Schedule
- Paper Submission Due: April 1, 2013
- Notification of Paper Acceptance: June 3, 2013
- Final Paper Submission: July 8, 2013
- Symposium Website: http://controlsystems2013.inl.gov

Cost
- $495
- $445 for registration by July 12, 2013
- $50 discount for IEEE IES members
- Half price registration for registered students

Venue/Accommodations
Hilton, San Francisco Financial District
750 Kearny Street
San Francisco, California, United States 94108
Tel: 415-765-7838
Fax: 415-765-7890

Schedule
- Day 1: Tutorial & Workshop Sessions
- Day 2: Paper Sessions
- Day 3: Panel Discussions

Benefits
- Opportunity to participate in an evolving focus area within critical infrastructure protection and cyber-physical systems
- Reduced registration fee for IEEE IES members
- Optional trip to area attraction for a nominal fee

Call for Papers
Paper submission will be handled through the symposium website listed above.
Please refer to this website for the latest information.

Topical Areas (including, but not limited to)
- Human Machine Interaction: cognitive modeling, machine learning, digital human modeling
- Human Systems Design: environmental configuration, tailored presentation
- Control Theory: intelligent, reconfigurable, optimal
- Control Framework: supervisory, multi-agent, distributed intelligence
- Sensor Architectures: embedded modeling and analysis, intelligence and agents, wireless control and determinism, multi-parameter integration and diversity
- Monitoring/Control Security: decoys, randomization, diversity, training and cognition, decision making, measurement
- Cyber Architecture: health indicators, defense optimization
- Data Fusion: data reduction, security characterization, data diversity, anomaly detection, response prioritization
- Computational Intelligence: machine learning, neural networks, fuzzy logic, evolutionary computation, Bayesian belief networks
- Cyber-physical power and energy systems: real-time communication, protection, control, resilience, reliability, sustainability, efficiency
- Robotic systems: Failure/error tolerance and recovery, adaptable/flexible architectures, multi-level/agent systems, multi-sensor fusion, tele-presence, probabilistic behaviors, performance validation/verification, communications security

Keynote Speakers
- Dr. John Barkyoumb, Office of the Secretary of Defense
- Dr. Piero Bonissone, General Electric Global Research
- Dr. Massoud Amin, University of Minnesota

General Chairs
- Frank Ferrese, Naval Surface Wafare Center
- David Scheidt, Johns Hopkins Applied Physics Laboratory

Organizing Chair
- Angela Tofani, Naval Surface Warfare Center

Publication Chair
- Li Bai, Temple University

Technical Co-Sponsor
- IEEE Industrial Electronics Society

Technical Program Chairs
- Prof. Juan Rodriguez-Andina, University of Vigo
- Dr. Aleksander Malinowski, Bradley University

Technical Program Committee
- Said Ahmed-Zaid, Boise State University
- Saurabh Amin, Massachusetts Institute of Technology
- Juan Jose Rodriguez Andina, University of Vigo
- Azad Azadmanesh, University of Nebraska, Omaha
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- Jonathan Butts, Air Force Institute of Technology
- Barrett Caldwell, Purdue University
- Álvaro A. Cárdenas, Fujitsu Laboratories of America
- Marco Carvalho, Florida Institute of Technology
- YangQuan Chen, Utah State University
- John Chiasson, Boise State University
- Mo-Yuen Chow, North Carolina State University
- Michael Condry, INTEL
- John Doyle, California Institute of Technology
- Frank Ferrese, NAVSEA
- Douglas Few, Idaho National Laboratory
- John Gardner, Boise State University
- Devendra Garg, Duke University
- David Gertman, Idaho National Laboratory
- Annarita Giani, Los Alamos National Laboratory
- Diane Hooie, National Energy Technology Laboratory
- Scott Kerick, Army Research Laboratory
- Nicholas Kottenstette, WW Technology Group
- Axel Krings, University of Idaho
- Manish Kumar, University of Cincinnati
- Parag Lala, Texas A&M
- Nathan Lau, University of Virginia
- Timothy McJunkin, Idaho National Laboratory
- Miles McQueen, Idaho National Laboratory
- Mark Minor, University of Utah
- Kevin Moore, Colorado School of Mines
- Subbaram Naidu, Idaho State University
- Xinming Ou, Kansas State University
- Brian Powell, National Instruments
- Raghunathan Rengasamy, Texas Tech
- Eugene Santos, Dartmouth College
- Marco Schoen, Idaho State University
- Galina Schwartz, UC Berkeley
- William Smart, Washington University
- Charles Tolle, South Dakota School of Mines & Technology
- Zachary Tudor, SRI International
- Venkat Venkatasubramanian, Purdue University
- I-Jeng Wang, Johns Hopkins University, Applied Physics Laboratory
- Bogdan Wilamowski, Auburn University
- David Woods, Ohio State University
- Reed Young, U.S. Army ATEC

Resilience Week 2013

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